

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 July 2003 (17.07.2003)

PCT

(10) International Publication Number
WO 2003/058172 A3

(51) International Patent Classification⁷: G01D 5/245, 5/249

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(21) International Application Number:
PCT/EP2003/000385

(22) International Filing Date: 13 January 2003 (13.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0200575.9 11 January 2002 (11.01.2002) GB

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

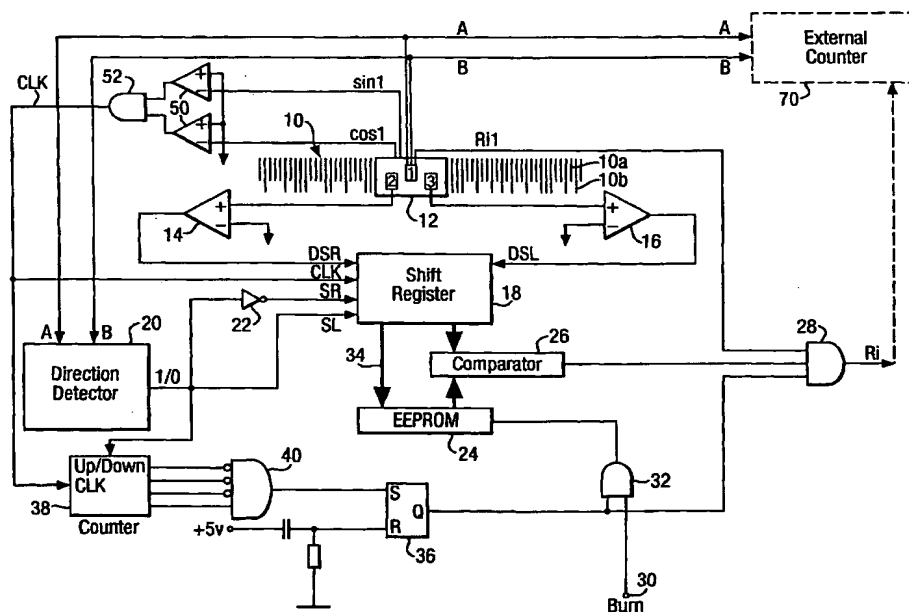
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: ENCODER WITH REFERENCE MARKS



(57) Abstract: A scale (10) has magnetic incremental scale marks in a track (10a), and a pseudo-random code sequence in a reference mark track (10b). Sensors (2, 3) feed the pattern of the code in the track (10b) into a bi-directional shift register (18). So that a user can select any desired position for use as a reference mark, a memory (24) is provided, into which any selected code value can be pre-stored. A comparator (26) then compares the code value in the shift register (18) with the code value in the memory (24) and outputs a reference mark signal (Ri) when they match.



Published:

— with international search report

(88) Date of publication of the international search report:
8 January 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

 Interr PCT/EP 0385

 A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G01D5/245 G01D5/249

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 G01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 545 701 A (HUGHES AIRCRAFT CO) 9 June 1993 (1993-06-09) abstract column 1, line 11 - line 14 column 3, line 21 - line 23 ---	1,2,4-10
Y	US 5 279 044 A (BREMER JOANNES GREGORIUS) 18 January 1994 (1994-01-18) column 2, line 60 - column 3, line 36; figure 2 ---	1,2,4-10
A	US 4 459 750 A (AFFA ALFRED) 17 July 1984 (1984-07-17) column 3, line 4 - line 49 -----	3

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

22 July 2003

Date of mailing of the international search report

28/07/2003

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INTERNATIONAL SEARCH REPORT

Information on patent family members

Internal publication No
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